

## Exhibit 300: Capital Asset Summary

### Part I: Summary Information And Justification (All Capital Assets)

#### Section A: Overview & Summary Information

**Date Investment First Submitted:** 2010-03-22  
**Date of Last Change to Activities:**  
**Investment Auto Submission Date:** 2012-02-27  
**Date of Last Investment Detail Update:** 2011-09-15  
**Date of Last Exhibit 300A Update:** 2012-04-27  
**Date of Last Revision:** 2012-04-27

**Agency:** 010 - Department of the Interior      **Bureau:** 10 - Bureau of Reclamation

**Investment Part Code:** 01

**Investment Category:** 00 - Agency Investments

**1. Name of this Investment:** BOR1-CVACS (Central Valley Automated Control System)

**2. Unique Investment Identifier (Ull):** 010-000000288

#### Section B: Investment Detail

- 1. Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

The Central Valley Automated Control System (CVACS) is a supervisory control and data acquisition (SCADA) system used to monitor and control water and power operations of the Central Valley Project (CVP) as well as other smaller projects within the MP Region. The primary goal is to deliver project benefits in a safe, reliable, and efficient manner. CVACS is comprised of a large, distributed network of sensors and automation equipment embedded in dams, power plants, pumping plants and control centers, providing real-time generation, reservoir and river status information and remote control of power generation and water releases. In the statutes authorizing the construction, operation and maintenance of the various divisions of the Central Valley Project between 1937 and 1965, Congress has consistently included language directing the Secretary to operate the Central Valley Project as a single, integrated project. CVACS is a key asset for decision-makers who manage limited natural water resources in the CVP to provide flood control, water deliveries and hydropower generation while meeting Central Valley Project Improvement Act requirements, the Endangered Species Act, Biological Opinions, CALFED objectives, and water rights decision (D-1641) for the San Francisco Bay/Sacramento-San Joaquin Delta (Delta). BOR-CVODSS (Central Valley Operations Decision Support System) - CVACS collects real-time water and power operations data that is transferred to a historical archive database containing 64 years of CVP operations data. Increasing internal and external demand for the

real-time water and power operations information, had to be balanced with requirements to secure access to CVACS. The historical archive database application, a component of the Central Valley Operations Decision Support System (CVODSS), enables access to CVP operations information and minimizes access to more critical systems. CVODSS is a separately reported Reclamation IT Portfolio System funded under the Water and Related Resources Appropriations for the Central Valley Project Water and Power Operations.

**2. How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

Supplies water and power facility SCADA technology that cost-effectively meets public trust responsibilities to efficiently manage water release operations for flood control, water deliveries, hydropower generation, water quality, and environmental mitigation purposes. Provides technology tools essential to the real-time coordination of hydroelectric power generation and water releases with interrelated infrastructures operated by federal, state, and local agencies. Force-multiplier service in the operational management of Central Valley Project. Remote control of hydropower generation and water releases from the Central Valley Control Center enabling unmanned operations of the majority of Central Valley Project power plants, reducing facility operation and maintenance costs. Scanning of more than 25,000 sensors, transducers and datapoints every second to monitor power generation, reservoir conditions, water releases, water quality, and facility conditions. Aggregated and Summarized real-time operations information for decision-makers who manage limited natural water resources to meet statutory requirements and operational objectives. Impacts of not fully funding: Loss of human capital with specialized knowledge and skills supporting the SCADA; deferred system maintenance leading to increased risks to critical infrastructure assets; increased costs to manually operate facilities, collect, calculate and report reservoir storage, inflows, river releases, water quality, and hydropower generation information; decreased availability of automatic generation control and 4-second data exchanges w/ Western Area Power Administration; decreased capability in timeliness and quality of current operational information for decision-makers managing limited natural resources to meet statutory requirements and operational objectives while providing flood control, water deliveries, and hydropower generation; decreased capability to coordinate water operations w/ federal and state partners.

**3. Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

Principle accomplishments for FY11: - Meeting our performance goal of greater than 99.9% system availability. - Undertaking and completing significant new work to meet new NERC CIP compliance requirements. - Initiated new MP Region SCADA Liaison Program. - Provided continuous 24/7 support to all MP Region SCADA users.

**4. Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

CY and BY planned accomplishments include the following: - Complete NERC CIP compliance work within Bureau mandated timeline. - Continue integration work on smaller

MP Region SCADA systems. - Begin work on defining CVACS's next system upgrades. - Continue ongoing 24/7 support for CVACS. - Continue to execute CVACS's Continuous Improvement Plan.

5. **Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

2011-08-31

## Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	\$0.0	\$0.0	\$0.0	\$0.0
DME (Excluding Planning) Costs:	\$0.0	\$0.0	\$0.0	\$0.0
DME (Including Planning) Govt. FTEs:	\$0.0	\$0.0	\$0.0	\$0.0
Sub-Total DME (Including Govt. FTE):	0	0	0	0
O & M Costs:	\$4.4	\$0.5	\$0.6	\$0.6
O & M Govt. FTEs:	\$9.9	\$1.5	\$1.4	\$1.5
Sub-Total O & M Costs (Including Govt. FTE):	\$14.3	\$2.0	\$2.0	\$2.1
Total Cost (Including Govt. FTE):	\$14.3	\$2.0	\$2.0	\$2.1
Total Govt. FTE costs:	\$9.9	\$1.5	\$1.4	\$1.5
# of FTE rep by costs:	60	9	9	9
Total change from prior year final President's Budget (\$)		\$0.0	\$0.0	
Total change from prior year final President's Budget (%)		0.30%	0.40%	

**2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:**

NA - no changes

## Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value (\$M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded	1425	<a href="#">INR11PX20073</a>									

**2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:**

Currently the investment uses a continuous improvement model and projects are not large enough to warrant use of EVM. Earned Value will be required where appropriate if the situation should change.

Exhibit 300B: Performance Measurement Report

Section A: General Information

Date of Last Change to Activities:

Section B: Project Execution Data

Table II.B.1 Projects					
Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)
NONE					

Activity Summary								
Roll-up of Information Provided in Lowest Level Child Activities								
Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M )	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
NONE								

Key Deliverables								
Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
NONE								

## Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
Operate and maintain reliable, safe, and secure water infrastructure: Water infrastructure is in fair to good condition as measured by the Facilities Reliability Rating Dams (FY07 GPRA Goal No. UIM.4.1a)	% of facilities that are in fair to good condition	Mission and Business Results - Services for Citizens	Over target	92.000000	92.000000	93.000000	93.000000	Semi-Annual
Hydropower Automation Provide automatic generation control	% of time auto generation cntrl srvc available	Customer Results - Service Accessibility	Over target	99.900000	99.900000	99.900000	99.900000	Semi-Annual
Hydropower Generation Provide generation monitoring	# data points yrly to monitor hydropwr generation	Process and Activities - Productivity	Over target	241250000.000000	241250000.000000	241250000.000000	241250000.000000	Semi-Annual
Assure reliability of SCADA system	% time CVACS is in forced outage	Technology - Reliability and Availability	Under target	0.100000	0.100000	0.100000	0.100000	Monthly
All required supporting document artifacts for this "major" IT Investment (as identified in the current budget year OMB A-11 guidance) will be kept current & be available for DOI/OMB review within the 10 day requirement.	All current artifacts in DOI sharepoint site	Process and Activities - Quality	Over target	8.000000	8.000000	8.000000	8.000000	Semi-Annual